Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims

Claims 1-6. (Cancelled).

Claim 7. (Previously Presented): A method of treating a viral infection, comprising administering to a patient suffering from the viral infection a therapeutic amount of a polypeptide having histidine ammonia lyase activity.

Claim 8. (Previously Presented): The method according to claim 7, wherein the histidine ammonia lyase activity is about 40 IU/mg protein and the polypeptide corresponds in sequence to histidine ammonia lyase of *Corynebacteriaceae*.

Claim 9. (Previously Presented): The method according to claim 7, wherein the histidine ammonia lyase activity is not substantially decreased in the presence of L-histidinol or a therapeutic salt thereof.

Claim 10. (Previously Presented): The method according to claim 9, further comprising administering a therapeutic amount of L-histidinol or a therapeutic salt thereof.

Claim 11. (Currently Amended): The method according to claim 7, wherein the viral infection is caused by a virus is selected from the group consisting of Herpes Virus Type 1, Herpes Simplex Virus Type 2, Varicella-Zoster Virus, Epstein-Barr virus, Cytomegalovirus, Respiratory Syncytial Virus, and Human Immunodeficiency Virus.

Claim 12. (Previously Presented): A method for treating a patient suffering from a cancer, comprising administering to the patient suffering from said cancer a therapeutic amount of a polypeptide having about 40 IU/mg protein of histidine ammonia lyase activity, wherein said histidine ammonia lyase activity is not substantially decreased in the presence of L-histidinol or a therapeutic salt thereof and the polypeptide corresponds in sequence to histidine ammonia lyase of *Corynebacteriaceae*, and a therapeutic amount of L-histidinol or a therapeutic salt thereof.

Claim 13. (Currently Amended): A method for reducing toxicity to normal cells from chemotherapeutic agents ~~or retroviral vectors~~, comprising

(i) administering to a patient a therapeutically effective amount of a polypeptide having histidine ammonia lyase activity, and

(ii) additionally administering to said patient a therapeutically effective amount of a chemotherapeutic agent ~~or retroviral vector~~, whereby said polypeptide having histidine ammonia lyase activity selectively depletes circulating histidine and causes growth arrest in normal cells, without affecting the growth of tumor cells.

Claim 14. (Previously Presented): The method according to claim 13, wherein upon the administration of said polypeptide, non-diseased cells of said patient enter a reversible quiescent state.

Claim 15. (Previously Presented): The method according to claim 13, wherein the polypeptide is a modified polypeptide that comprises polyethylene glycol.

Claim 16. (Currently Amended): A method for delivering an immunosuppressant to a patient, comprising: administering to a patient a therapeutically effective amount of a polypeptide having histidine ammonia lyase activity, wherein said polypeptide is PEGylated and wherein said polypeptide generates trans-urocanic acid (t-UA) *in vivo*; and subjecting the patient to an irradiating agent, wherein said irradiating agent causes the photoisomerization of t-UA to its cis isomer (c-UA), and wherein said cis isomer comprises an immunosuppressive property.

Claim 17. (Previously Presented): The method according to claim 16, wherein the irradiating agent is UVB irradiation, and wherein the polypeptide comprises polyethylene glycol.

Claim 18. (Previously Presented): The method according to claim 17, wherein the patient has an immune system disorder.

Claim 19. (Previously Presented): The method according to claim 18, wherein the UVB radiation is localized.

Claim 20. (Previously Presented): The method according to claim 16, further comprising administering to the patient a transplanted organ.

Claims 21-27. (Cancelled).

Claim 28. (Previously Presented): The method according to claim 7, wherein the polypeptide is selected from the group consisting of SEQ ID NOS: 1-5, 8-10, and 12.

Claim 29. (Previously Presented): The method according to claim 7, wherein the polypeptide comprises conservative substitutions relative to the sequence of histidine ammonia lyase of *Corynebacteriaceae* and wherein the polypeptide maintains the histidine ammonia lyase activity.

Claim 30. (Currently Amended): The method according to claim 29, wherein the polypeptide comprises SEQ ID NOS: 6 or 11, wherein each amino acid represented by an "X" is substituted with an amino acid from the corresponding position of the histidine ammonia lyase selected from the group consisting of *Corynebacteriaceae*, *Streptomyces coelicolor*, *Agrobacterium rhizogenes*, *Vibrio cholerae*, *Pseudomonas aeruginosa*, *Bacillus halodurans*, *Pseudomonas aeruginosa*, *Thermoplasma acidophilum*, *Mus musculus*, ~~Streptomyces coelicolor, Agrobacterium rhizogenes, Vibrio cholerae, Pseudomonas aeruginosa, Bacillus halodurans, Pseudomonas aeruginosa, Thermoplasma acidophilum, Mus musculus,~~ rat, uncultured bacterium pCosAS1, *Rhizobium meiloti*, and *Halobacterium sp* ~~Rhizobium meiloti, and Halobacterium sp~~ and wherein at least one of the amino acids represented by an "X" is not substituted with an amino acid from the corresponding position of the histidine ammonia lyase of *Corynebacteriaceae*.

Claim 31. (Previously Presented): The method according to claim 12, wherein the polypeptide is selected from the group consisting of SEQ ID NOS: 1-5, 8-10, and 12.

Claim 32. (Previously Presented): The method according to claim 12, wherein the polypeptide comprises conservative substitutions relative to the sequence of histidine

ammonia lyase of *Corynebacteriaceae* and wherein the polypeptide maintains the histidine ammonia lyase activity.

Claim 33. (Currently Amended): The method according to claim 32 ~~claim 31~~, wherein the polypeptide comprises SEQ ID NOS: 6 or 11, wherein each amino acid represented by an "X" is substituted with an amino acid from the corresponding position of the histidine ammonia lyase selected from the group consisting of *Corynebacteriaceae*, *Streptomyces coelicolor*, *Agrobacterium rhizogenes*, *Vibrio cholerae*, *Pseudomonas aeruginosa*, *Bacillus halodurans*, *Pseudomonas aeruginosa*, *Thermoplasma acidophilum*, *Mus musculus*, ~~Streptomyces coelicolor, Agrobacterium rhizogenes, Vibrio cholerae, Pseudomonas aeruginosa, Bacillus halodurans, Pseudomonas aeruginosa, Thermoplasma acidophilum, Mus musculus,~~ rat, uncultured bacterium pCosAS1, *Rhizobium meiloti*, and *Halobacterium sp* ~~Rhizobium meiloti, and Halobacterium sp~~ and wherein at least one of the amino acids represented by an "X" is not substituted with an amino acid from the corresponding position of the histidine ammonia lyase of *Corynebacteriaceae*.

Claim 34. (Currently Amended): A method of treating a viral infection comprising administering to a patient suffering from the viral infection a therapeutic amount of a histidine analog ~~having histidine ammonia lyase activity~~.

Claims 35-38. (Cancelled).